REMARKS/ARGUMENTS

This is in response to the Office Action dated June 25, 2008. Claims 2-13 are pending. Claims 2-6 and 8 stand rejected in the outstanding Office Action. Claims 7, 9 and 10 are withdrawn. Claims 2-3 and 6 have been amended. New claims 11-13 have been added. Claim 1 has been cancelled.

Applicant thanks the Examiner for the consideration of the Information Disclosure Statements filed January 18, 2006, May 31, 2006, July 10, 2007 and October 3, 2007.

Applicant thanks the Examiner for the acknowledgment of Applicant's claim for foreign priority and the receipt of a certified copy of the priority document.

The rejection of independent claims 2 and 3, as allegedly being anticipated under 35 U.S.C. § 102(b) by Arikawa et al. (US 6,147,937) is respectfully traversed. Arikawa fails to disclose or even remotely suggest each and every limitation set forth in the claims. Anticipation requires that "each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference", *Verdegaal Bro. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987) (MPEP § 2131).

Arikawa generally discloses a display device (Fig. 1) which can operate using external light in a reflective mode or an internal light source when used in a transmissive mode (col. 11, lines 1-7). The display comprises a liquid crystal panel 8, a light scattering body 10, a polarization separating film 32 and a light source 18 disposed in that order. The polarization separating film comprises a quarter wavelength plate 35 and a liquid crystal layer 36. In the reflective mode of operation, when light originating from the exterior and having linear polarization along a first direction is incident onto quarter wavelength plate 35, undergoes change of polarization state and becomes counterclockwise circularly polarized. It is then

reflected by liquid crystal 36 and is transmitted through the device towards the exterior. On the other hand, if light having linear polarization along a second direction being different than the first direction is incident onto quarter wavelength plate 35, it then undergoes change of polarization state and becomes clockwise circularly polarized. It is then transmitted through the liquid crystal 36 (col. 12, lines 27-42).

The Examiner identified the claimed polarization selective reflection means as the polarization separating film 32, the claimed light irradiating means as the light scattering body 10, and the claimed polarization control means as the quarter wavelength plate 35 and the liquid crystal 36.

Claim 1 has been cancelled.

Claim 2 has been amended (incorporating the limitations of claim 4) to specify that the liquid crystal display device includes a display window provided on a surface thereof on a side of the liquid crystal display medium, and a light inlet window provided on a surface thereof on a side of the polarization selective reflection means, and to also specify that "light incident on a first surface (of the polarization selective reflection means) opposite to a second surface (of the polarization selective reflection means) on a side of the liquid crystal display medium", which enters the "polarization selective reflection means", is "<u>surrounding light</u> incident on a first surface opposite to a second surface on a side of the liquid crystal display medium".

The exemplary embodiment presented in the instant application differs from the device of Arikawa, since the former uses, as surrounding light, light entering from both the front surface and the back surface of the device, whereas the device of Arikawa uses only light entering from above the front surface of the device.

Specifically, in the device of Arikawa, as shown in Fig. 1, a light source (EL DEVICE) is provided at a position which is closest to the back surface in a line of optical components (closer to the back surface than polarization separator 32). Therefore, the device is not arranged so as to use surrounding light entering from the back surface. Even if a light inlet window is formed on an enclosure on the backside of the light source, it is impossible for the surrounding light entering from the light inlet window to further enter the inside of the device due to the presence of the light source. Moreover, if the light inlet window is formed, there arises a problem that an aspect (structure) inside the liquid crystal display device, that is the light source, can be seen.

In contrast, in the exemplary embodiment of the instant application, "light irradiating means for irradiating the liquid crystal display medium with light from a light source", instead of the light source itself, is provided between polarization selective reflection means and the liquid crystal display medium (first polarization plate). In other words, the polarization selective reflection means is provided on the inner side of the light inlet window formed on the side of the back surface. The polarization selective reflection means transmits a light component in a first polarization state of light entering from the light inlet window, and reflects a light component in a second polarization state, which is different from the first polarization state. By means of this, it becomes possible to effectively use surrounding light entering from the light inlet window, and to make an inside (internal structure) of the liquid crystal display device unseen. Moreover, it is possible to protect user's privacy since a display screen cannot be seen (see p. 13, line 25 to p. 14, line 7 of the specification).

Regarding claim 3, Arikawa's device does not comprise "polarization control means, provided between the polarization selective reflection means and the light irradiating means, for controlling a polarization status of light traveling from the polarization selective reflection means

towards the liquid crystal display medium", as required by claim 3. The Examiner identifies elements 35 and 36 as the claimed polarization control means. However, these two elements, 35 and 36, comprise the polarization separating film 32, which was identified as the claimed separate polarization selective reflection means. In other words, Arikawa's device lacks polarization control means which is separate from the polarization selective reflection means.

The exemplary embodiment of the instant application achieves the following distinguished effects by comprising a separate "polarization control means".

The light component in the first polarization state of the light from the light source emitted from the light irradiating means in a direction towards the liquid crystal display medium is transmitted through the first polarizing plate, and enters the liquid crystal layer. At this point, the light reaches the viewer, if the liquid crystal layer is controlled so that the light component in the first polarization state having been transmitted through the first polarizing plate is converted into the light component in the second polarization state (p. 16, lines 12-22 in specification).

On the other hand, the light component in the second polarization state of the light emitted from the light irradiating means in a direction towards the polarization selective reflection means is reflected from the polarization selective reflection means towards the liquid crystal display medium. In this case, the polarization control means controls the polarization state of the light traveling towards the liquid crystal display medium. At this point, for example, in accordance with an orientation status of the liquid crystal molecules of the liquid crystal layer, the polarization control means converts, into the light component in the first polarization state, the light component in the second polarization state, having been reflected from the polarization selective reflection means. This allows the light transmitted through the polarization control means to be transmitted through the first polarizing plate of the liquid crystal display medium,

and reach the viewer, via the second polarizing plate. Thus, it is possible to effectively use the light emitted from the light irradiating means, therefore achieving good screen display even under weak surrounding light environment (p. 16, line 23 to p. 17, line 19).

Further, the light component in the first polarization state of the light (surrounding light) incident on the first surface opposite to the second surface on the side of the liquid crystal display medium is transmitted through the polarization selective reflective means, while the light component in the second polarization state of the light incident on the first surface is reflected from the polarization selective reflection means (p. 17, line 20 to p. 18, line 2). At this point, for example, by controlling the polarization control means so that the polarization state of the light component in the first polarization state is not varied in accordance with the orientation status of the liquid crystal molecules in the liquid crystal layer, the light having been transmitted through the polarization selective reflection means is transmitted through the polarization control means, with the polarization state being kept in the first polarization state. The light is further transmitted through the first polarizing plate of the liquid crystal display medium, and reaches the viewer via the second polarizing plate (p. 18, lines 3-14).

That is, the above described polarization control performed by the polarization controlling liquid crystal medium realizes a liquid crystal display device, which is capable of performing a good screen displaying even under an environment where the light incident on the first surface of the polarization selective reflection means opposite to the second surface on the side of the liquid crystal display medium is strong (p. 18, lines 15-22).

For the above reasons, claims 2 and 3 are allowable.

Support for new added claim 11 can be found, for example, in p. 34, line 17 to p. 35, line 6 and Fig. 5 of the specification. Effects attained by this arrangement are described in p. 35,

lines 7-11 of the specification. Support for the new added claim 12, can be found, for example, in p. 45, line 20 to p. 46, line 7 and Fig. 7 of the specification. Effects attained by this arrangement are described in p. 45, line 18 to p. 46, line 4 of the specification.

It is respectfully requested that the rejection of claims 5, 6, 8, 11, 12 and 13, all dependent from claim 2 or 3, also be withdrawn.

In view of the foregoing and other considerations, all claims are deemed in condition for allowance. A formal indication of allowability is earnestly solicited.

The Commissioner is authorized to charge the undersigned's deposit account #14-1140 in whatever amount is necessary for entry of these papers and the continued pendency of the captioned application.

Should the Examiner feel that an interview with the undersigned would facilitate allowance of this application, the Examiner is encouraged to contact the undersigned.

Respectfully submitted,

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